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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,973	11/21/2003	Yang Hwan No	K-0551	8006

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EXAMINER	
PERRIN, JOSEPH L	

ART UNIT	PAPER NUMBER
1792	

MAIL DATE	DELIVERY MODE
10/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/717,973	NO ET AL.	
	Examiner	Art Unit	
	Joseph L. Perrin, Ph.D.	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-15 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-15 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 21 November 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the description of what is "[d]isclosed" is not clear and concise. Correction is required. See MPEP § 608.01(b).

Information Disclosure Statement

4. It is noted that an Information Disclosure Statement under 37 CFR 1.97 for the present application has not been received by the Office. If Applicant believes this to be in error, Applicant is urged to submit documentation supporting a proper filing of any previously submitted information disclosure statements in order to have such disclosures considered by the Office.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the joint portion being "indistinguishable from the lifters and the perforated holes" renders the claim indefinite because such subjective language is wholly dependent on user determination and opinion. As best understood, the position is taken that the joint structure being small and relatively flat to match the contour of the inner wall of the drum reads on such broad and unclear language and the claims will be examined accordingly. However, additional structural clarification in the claim to define how such structure is "indistinguishable" is suggested.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-6 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by, or in the alternative under 35 U.S.C. 103(a) as being obvious over WO 03/054274 to NITSCHE (Nat. Stage U.S. Patent No. 6,935,143 relied upon as unofficial translation). Re claim 1, NITSCHE teaches a laundry drum for a conventional washing machine

(common knowledge to include a housing, tub with perforated rotatable drum, lifters and a motor), the drum having a joint portion (5) extending on the sidewall in a length direction which appears indistinguishable from lifter (13) and the drum perforated holes (see Figures 3-4 and relative associated text). Re claims 2-6, NITSCHE further discloses the joint having curled portions coupled together (Figure 5), plural intermittent joint lines (Figures 3-4) and the well-known concept of coupling via welding (col. 3, lines 32-36). Re claim 11, the joint line lies closer to the lifter (13) than the remainder of the inner drum surface which would comprise plural holes (see Figure 4). Even if, *arguendo*, one were to construe the conventional washing machine of NITSCHE not including the well-known components of plural lifters and plural perforated holes in a conventional washing machine having the tub, rotatable drum and motor, it would have been obvious to provide such washing machine components to yield predictable results of their intended purpose. While the prior art is replete with teachings of such conventional washing machines, such can be evidenced by KIM cited below.

9. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,802,886 to KIM. As illustrated in Figure 6, KIM discloses a conventional washing machine having a housing, a tub (2), a perforated drum (3) rotatably installed in the tub, with a driving motor. KIM further discloses the drum having plural lifters (4), a joint portion (3e) extending on the sidewall in a length direction that appear to be indistinguishable from the lifters and perforations, with the joint having first and second curled ends engaged to be joined (see Figures 6-8 and relative associated text). Accordingly, recitation of KIM reads on applicant's claimed invention.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 4-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIM in view of NITSCHE (both previously cited). Recitation of KIM is repeated here from

above. While KIM discloses the joint located between the lifters and on the lifter readable as being indistinguishable from the lifter and holes, KIM does not disclose plural joint lines formed intermittently and by welding or as a "coupling member" (claims 4-6), the joint portion separated or parallel with adjacent perforated hole columns to leave a same distance between the holes (claims 7-9), the joint portion being closer to the lifter than the holes or between the lifter and holes (claims 10-13), equal distances between the joint portion and lifter as well as the lifter and column of holes (claim 14), and the lifter being on a centerline between the joint portion and the column of holes (claim 15). NITSCHE is recited as above for claims 1-6 & 11. Thus, the combination of "old elements" in the references would yield the same predictable results as claimed. NITSCHE also discloses rearranging the location of the joint portion on the inner drum (see Figure 3) or under a lifter (see Figure 4). Both KIM and NITSCHE disclose configurations of the joint in different rearrangements. A person of ordinary skill in the art, upon reading the reference, would also have recognized the desirability of the location of the joint as both disclose the preferred embodiment as being at or near the lifter which would provide an indistinguishable appearance of the drum joint. Thus, it would have been obvious to a person of ordinary skill in the art to try the rearrangement of the joint near the lifter (i.e. between the lifter and the general inner drum surface containing perforations) to hide the joint in an attempt to increase aesthetics, as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp (i.e. it is common sense to manufacture more aesthetic component, for instance, to increase sales). In turn, because the simple rearrangement of the joint

location has the predictable result of the prior art, it would have been obvious to rearrange the joint location in the manner claimed by applicant. That is, there appears to be nothing unexpected in rearranging the location of the joint and one having ordinary skill in the art would have found it "obvious to try" the limited number of configurations of the joint location in order to achieve the claimed drum configuration. The Examiner further notes that it is well settled that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

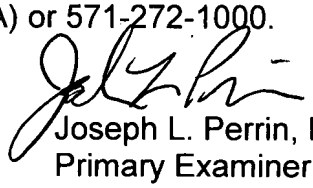
Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 2,855,698 to HUTT, which discloses a laundry appliance drum with joint; U.S. Patent No. 1,968,679 to GERLACH, which discloses a conventional washing machine drum having perforations, lifters and a joint portion circumferentially coupling the drum; U.S. Patent No. 351,062 to MATHEWS, which discloses a conventional washing machine drum having perforations, lifters and a joint portion circumferentially coupling the drum.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1746

JLP